

Application No.: 10/617117  
Docket No.: AD6877USNA

Page 4

### REMARKS

The Examiner states certain references were not provided. These are enclosed herewith together with an Information Disclosure Statement.

In the claims:

Claim 1 has been amended to recite the LCP is in a continuous phase. Basis for this change is p. 5, line 30.

Claims 1-15 have been rejected under 35 U.S.C. 112, first paragraph, for lack of enablement. Applicants are claiming a composition containing certain amounts of an aramid, LCD, perfluorinated polymer, and optionally hollow glass or quartz spheres. While this composition may have a low dielectric constant (and indeed often does have a low dielectric constant), that is not a limitation of the claim, and the claim is perfectly enabled without that limitation. Nothing in the law requires that one or more properties of a composition be included in a claim, see for instance "Advantages or 'sales pitch features' do not properly belong in claims, sole function of which is to point out distinctly process, machine, manufacture, or composition of matter that is patented, not its advantages;" Preemption Devices, Inc. v. Minnesota Mining and Manufacturing Co., (CAFC 1984) 221 USPQ 841. Insofar as whether making of such compositions is enabled, at p. 5, lines 18-29 a description of how to make such compositions, which describes techniques and apparatus well known in the polymer processing field are given. In addition Examples 1-8 give concrete typical instructions on how to make such compositions.

The statement Applicants acknowledge that the composition as claimed currently exists is not understood. Please clarify and particularly point out how this relates to a rejection under Sec. 112.

Claims 1-15 have been rejected under 35 U.S.C. 102(b) as being anticipated by Hoiness, US 5811042. Applicants respectfully traverse.

The Examiner states the following about the Hoiness reference:

- (a) The particulate filler can be fibers in the form of floc or pulp.
- (b) These fibers can be aramids.
- (c) They can be "LCPs" because they are anisotropic.
- (d) The matrix resin can be a perfluoropolymer.

Application No.: 10/617117  
Docket No.: AD6877USNA

Page 5

(e) The materials of Hoiness are useful for gasketing and other composite friction uses.

Applicants agree with all of these statements except (c) and cannot find a basis therefore in the reference. While some of the aramids mentioned in Hoiness may be anisotropic, they are not necessarily LCPs as defined in the present application, see p. 3, lines 28-32. In the TOT test the polymer must be melted, and aramids such as p-polyphenylene terephthalate are not meltable, i.e., they decompose before the melt.

As the Examiner has pointed out, the present claims require the presence of (quantities omitted):

(1) An LCP (although apparently in the rejection under section 103, see below, the Examiner states LCPs are not present in Hoiness).

(2) A particulate aramid.

(3) A particulate perfluoropolymer.

(4) Optionally hollow glass or quartz spheres.

The following differences are noted between the present claims and Hoiness:

(i) LCPs are not mentioned in Hoiness, especially as continuous phases (sometimes also referred to as matrix resins, as they are in Hoiness). Therefore even if the aramids were LCPs, they are not a continuous phase anyway.

(ii) In Hoiness the perfluoropolymers are mentioned as matrix resins (see col. 2, line 51 to col. 3, line 3). Matrix resins are normally considered to be continuous phases since they hold the rest of the composition's components together (see col. 3, lines 4-13). Therefore they are not particulate (discontinuous) as described in the present invention.

(iii) As for claims 11-15, which claim an electrical connector and an electronic or electrical part, nothing within Hoiness mentions these uses. Gasketing and composite friction uses are not electrical connectors or an electronic or electrical part.

It is well settled that "Rejections under 35 U.S.C. 102 are proper only when claimed subject matter is identically disclosed or described in prior art; in other words, all material elements recited in claim must be found in one unit of prior art to constitute anticipation;" In re Marshall (CCPA 1978) 198 USPQ 344. For claims 1-10 Hoiness doesn't mention LCPs, especially in a continuous phase, and also does not

Application No.: 10/617117  
Docket No.: AD6877USNA

Page 6

mention particulate perfluoropolymers being present in the composition. Therefore claims 1-10 are not anticipated by Hoiness.

Claims 11-15 are not anticipated for the same reasons mentioned in the preceding paragraph. In addition since Hoiness does not mention the types of uses mentioned in claims 11-15 this is another reason for nonanticipation.

Claims 1-15 have been rejected under 35 U.S.C. 103(a) as obvious over Hoiness in view of Swirbel (US 6388202).

The Examiner has applied Hoiness as described under the rejection under Section 102, and Applicants include here by reference the description and their response to it as given above under the rejection under Section 102.

The passage referred to in Swirbel by the Examiner is at col. 3, lines 1-12. The Examiner uses Swirbel to introduce the idea of a liquid crystalline polymer, which is not disclosed in the Hoiness reference. However there is no reason to combine these references, so a *prima facie* case of obviousness has not been made.

There is no teaching, suggestion or incentive in this instance which supports the combination. The references are in totally different fields. Hoiness' compositions are useful for gaskets and composite friction material, and Swirbel's, a printed circuit board. Clearly such uses require different combinations of properties. Hoiness uses a composition which is a thermoplastic matrix resin containing a fibrous material and aramid particles, while at the passage of Swirbel referred to by the Examiner, a resin is used to coat copper foil. The resin may be a polyfluorocarbon (which is not necessarily a perfluoropolymer), or an LCP, or an aramid. Although the aramid and perhaps a perfluorocarbon are common to Swirbel and Hoiness, there is no other commonality. Thus, there is no reason for the skilled person in the field of Hoiness to refer to Swirbel, and vice versa.

"Virtually all inventions are necessarily combinations of old elements. The notion, therefore, that combination claims can be declared invalid merely upon finding similar elements in separate prior patents would necessarily destroy virtually all patents and cannot be the law under the statute, 103." Pandiut Corp. v. Dennison Manufacturing Co. (CAFC 1987) 1 USPQ2d at 1603.

Because a *prima facie* case of obviousness has not been made this rejection is overcome.

Application No.: 10/617117  
Docket No.: AD6877USNA

Page 7

It is further pointed out that even if one assumes a *prima facie* case of obviousness has been made, all the limitations of the present claims are not mentioned or suggested by the combination of Hoiness and Swirbel. For instance the use of a particulate perfluoropolymer, and especially in an LCP matrix, is not suggested. For this reason also, Claims 1-15 are not obvious over these references.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,



ARNE R. JARNHOLM  
ATTORNEY FOR APPLICANTS  
Registration No.: 30,396  
Telephone: (302) 992-2394  
Facsimile: (302) 992-3257

Dated: \_\_\_\_\_

8-16-05

T:\Patent Documents\Eng. Polymers\AD-68xx\AD6877\Response to Non Final Action 7-15-05.doc